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Please find below and/or attached an Office communication concerning this application or proceeding.



**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 13 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed towards non-statutory subject matter. A program as stated in claims 13 and 14 is not necessarily a "computer program." Page 53 of the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" clearly states "a computer readable medium encoded with a computer program" is considered as statutory; without such clear recitation in the claims, claims 13 and 14 are claiming computer program per se (although in the method step format), but is still rejected under 101 for claiming nonfunctional descriptive material that is recorded on some computer-readable medium.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The term "n dimensions" is not defined by the claims 6, 9, and 19, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 7-8, 10-18, 22-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen et al. (U.S. Patent Application Publication 2003/0217123)

Regarding claim 1, Andersen et al. teach “An information transmission/reception method (paragraph 1), comprising: storing predetermined information in a transmission system and in a reception system (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc == transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of n determines the action performed); selecting one piece of the information stored in the transmission system (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to

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reboot); transmitting the calling signal to the reception system only a number of times that is equal to the detected transmission count (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring will reboot the PC and transmits so); counting the number of times the calling signal is received at the reception system to determine the transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); and retrieving from the predetermined information stored in the reception system a piece of information associated with the transmission count of the received calling signals. (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc)"

Regarding claim 2, Andersen et al. teach "The information transmission/reception method according to claim 1, wherein the predetermined information is appliance operation data for operating a household appliance in communication with the reception system." (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 3, Andersen et al. teach "The information transmission/reception method according to claim 2, wherein the reception system operates the household appliance according to the retrieved piece of appliance operation data." (paragraph 49-52, i.e. the access control card operates the apparatus based on the number of rings received (retrieved piece of appliance operation data)

Regarding claim 7, Andersen et al. teach "An information transmission method (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception

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system) comprising: storing predetermined information in a transmission system (paragraph 49-52, the user determines  $n$ , the number of rings and uses this  $n$  to effectuate an action; therefore user stores this predetermined info), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of  $n$  determines the action performed), selecting one piece of the information stored in the transmission system (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot); and transmitting the calling signal from the transmitting system only a number of times that is equal to the detected transmission count. (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring to reboot the PC)”

Regarding claim 8, Andersen et al. teach “The information transmission method according to claim 7, wherein the predetermined information is appliance operation data for operating a household appliance at a remote location.” (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 10, Andersen et al. teach “An information reception method (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the

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apparatus (computer) based on the number of incoming rings, host pc == reception system), comprising: storing predetermined information in a reception system ((paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of n determines the action performed); counting a number of times a calling signal is received at the reception system to determined the transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); and retrieving from the predetermined information stored in the reception system a piece of information associated with the transmission count of the received calling signals. (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc)"

Regarding claim 11, Andersen et al. teach "The information reception method according to claim 10, wherein the predetermined information is appliance operation data for operating a household appliance in communication with the reception system." (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 12, Andersen et al. teach "The information reception method according to claim 11, wherein the reception system operates the household appliance according to the retrieved piece of appliance operation data." (paragraph 49-52, i.e. the access control card operates the apparatus based on the number of rings received (retrieved piece of appliance operation data)

Regarding claim 13, Andersen et al. teach "A computer-readable storage medium having stored thereon an information transmission program, the information transmission program comprising (paragraph 1-3, 5-7, i.e. a software-based system (remote access engine) to remotely control a PC): accessing predetermined information stored in a memory (paragraph 1-3, 5-7, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system using a software based system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of n determines the action performed); selecting one piece the information from the memory (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting the transmission count of calling signal associated with selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot); and transmitting the calling signal only number times that is equal to the detected transmission count. (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring to reboot the PC)"

Regarding claim 14, Andersen et al. teach "A computer-readable storage medium having stored thereon an information reception program, the information reception program comprising (paragraph 1, 50, 125, i.e. an user may remotely control



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the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system and access control card is part of the host pc): counting a number of times a calling signal is received to determine transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); accessing predetermined information stored in a memory (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc); and retrieving from the predetermined information stored in the memory a piece of information associated with the transmission count of the received calling signals. (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc)”

Regarding claim 15, Andersen et al. teach “A transmitter (paragraph 6, remote access engine on remote pc), comprising: a memory for storing predetermined information (paragraph 6, paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc== transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of  $n$  determines the action performed); selecting means for selecting one piece of the information stored in said memory

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(paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting means for detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot); and control means for controlling transmission of the calling signal only a number of times that is equal to the detected transmission count. (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring to reboot the PC) ”

Regarding claim 16, Andersen et al. teach “A receiver (paragraph 50, access control card on host pc), comprising: a memory for storing predetermined information (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc == transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of  $n$  determines the action performed); counting means for counting a number of times a calling signal is received to determine the transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); and means for retrieving from said memory a piece of information associated with the transmission count of the received calling

signals. (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc)"

Regarding claim 17, Andersen et al. teach "The receiver according to claim 16, wherein the predetermined information is appliance operation data for operating a household appliance in communication with said receiver." (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 18, Andersen et al. teach "The receiver according to claim 17, further comprising communication means in communication with said receiver, said communication means including appliance operation instructing means for operating the household appliance according to the retrieved appliance operation data." (paragraph 49-52, i.e. the access control card operates the apparatus based on the number of rings received (retrieved piece of appliance operation data)

Regarding claim 22, Andersen et al. teach "An information transmission/reception system (paragraph 1), comprising: a memory for storing predetermined information (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc == transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of  $n$  determines the action performed); a transmitter having selecting means for selecting one piece of the predetermined information from said memory (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number

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of times to reboot the apparatus), detecting means for detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot), and control means for controlling transmission of the calling signal only a number times that is equal to the detected transmission count (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot); a receiver having counting means for counting a number times the calling signal is received to determine the transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card), and means for retrieving from said memory a piece of information associated with the transmission count of the received calling signals (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc); and an exchange station for transmitting to said receiver only the number of times that is equal to the transmission count of the calling signal in response to an instruction from said control means of said transmitter. (paragraph 60, i.e. the exchange station == switch in the LAN, modem, or Internet network)"

Regarding claim 23, Andersen et al. teach "The information transmission/reception system according to claim 22, wherein the predetermined information is appliance operation data for operating a household appliance connected

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to said receiver.” (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 24, Andersen et al. teach “The information transmission/reception system according to claim 23, wherein said receiver has appliance operation instructing means for operating the household appliance according to the retrieved appliance operation data.” (paragraph 1, 49-52, reboot or remotely access and control the host pc)

Regarding claim 25, Andersen et al. teach “An information transmission system (paragraph 1), comprising: a processor operable to execute instructions (paragraph 6, remote access engine running on remote pc); and instructions, the instructions including accessing predetermined information stored in a memory (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc == transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of n determines the action performed); selecting one piece of the information from the memory (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g. n=2 to remote control and access and

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n<2 to reboot); and transmitting the calling signal only a number of times that is equal to the detected transmission count. (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring will reboot the PC and transmits so)"

Regarding claim 26, Andersen et al. teach "An information reception system (paragraph 1), comprising: a processor operable to execute instructions (paragraph 50, i.e. access control card on a host pc); and instructions, the instructions including counting a number of times a calling signal is received to determine a transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); accessing predetermined information stored in a memory (paragraph 49-52, the access control card determines that if n=2, answers the call and allow remote access and if n<2, reboot pc ), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 49-52, the access control card determines that if n=2, answers the call and allow remote access and if n<2, reboot pc ); and retrieving from the predetermined information stored in the memory a piece of information associated with the transmission count of the received calling signals. (paragraph 49-52, the access control card determines that if n=2, answers the call and allow remote access and if n<2, reboot pc )" )"

Regarding claim 27, Andersen et al. teach "The information reception system according to claim 26, wherein the instructions further comprise: operating a household appliance according to the retrieved piece of information." (paragraph 49-52, i.e. the

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access control card operates the apparatus based on the number of rings received  
(retrieved piece of appliance operation data)

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-6, 9, 19-21, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (U.S. Patent Application Publication 2003/0217123) in view of Joao (U.S. Patent Application Publication 2002/0121969).

Regarding claim 4, Andersen et al. teach "The information transmission/reception method according to claim 3."

However, they do not teach "wherein the reception system feeds back to the transmission system either information that the household appliance has operated properly or the information that the household appliance has not operated properly."

In the same field of endeavor, Joao teaches "wherein the reception system feeds back to the transmission system either information that the household appliance has operated properly or the information that the household appliance has not operated properly." (paragraph 21-23, 234, i.e. CPU reports back the operator (user) the status of the apparatus whether the apparatus is running) so that users may be kept apprised of

status of remote equipments as stated in paragraph 2 in order to provide security for equipment or premises as stated in paragraph 10.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s method, Joao's teachings above so that security may be provided for equipment or premises.

Regarding claim 5, Andersen et al. teach "The information transmission/reception method according to claim 4, wherein the information is a predetermined number of calling signals. (paragraph 50)"

However, they do not teach "the information being feedback and the feedback indicates that the household appliance has operated properly and household appliance has not operated properly."

In the same field of endeavor, Joao teaches "the information being feedback and the feedback indicates that the household appliance has operated properly and household appliance has not operated properly." (paragraph 21-23, 234, i.e. CPU reports back the operator (user) the status of the apparatus whether the apparatus is running) so that users may be kept apprised of status of remote equipments as stated in paragraph 2 in order to provide security for equipment or premises as stated in paragraph 10.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s method, Joao's teachings above so that security may be provided for equipment or premises.



Regarding claim 6, Andersen et al. teach "The information transmission/reception method according to claim 1."

However, they do not teach "wherein the predetermined information is arranged in a data structure having n dimensions."

In the same field of endeavor, Joao teaches "wherein the predetermined information is arranged in a data structure having n dimensions." (paragraph 214, transceiver stores information in a database 155, a database inherently has data structure of various dimensions)

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s method, Joao's teachings above, so that the transceiver can automatically and efficiently retrieve the settings from a database to remotely access and control an equipment instead of users manually entering them.

Regarding claim 9, Andersen et al. teach "The information transmission method according to claim 7."

However, they do not teach "wherein the predetermined information is arranged in a data structure having n dimensions."

In the same field of endeavor, Joao teaches "wherein the predetermined information is arranged in a data structure having n dimensions." (paragraph 214, transceiver stores information in a database 155, a database inherently has data structure of various dimensions)

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s method, Joao's teachings above, so that the transceiver can automatically and efficiently retrieve the settings from a database to remotely access and control an equipment instead of users manually entering them.

Regarding claim 19, Andersen et al. teach "The receiver according to claim 16."

However, they do not teach "wherein the predetermined information is arranged in a data structure having n dimensions."

In the same field of endeavor, Joao teaches "'wherein the predetermined information is arranged in a data structure having n dimensions." (paragraph 214, transceiver stores information in a database 155, a database inherently has data structure of various dimensions)

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s receiver, Joao's teachings above, so that the receiver can automatically and efficiently retrieve the settings from a database to access and control an equipment.

Regarding claim 20, Andersen et al. teach "A transmitter-receiver (paragraph 1, 50), comprising: a memory for storing predetermined information (paragraph 1, 50, i.e. an user may remotely control the performance of actions on the apparatus (computer) based on the number of incoming rings, host pc == reception system, remote pc == transmission system), each piece of the predetermined information being associated with a transmission count of a calling signal (paragraph 50, transmission count of n

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determines the action performed); selecting means for selecting one piece of the predetermined information from said memory (paragraph 49-52, selecting to call a number a number of specified times to perform actions on the apparatus or selecting to call less than or greater than a number of times to reboot the apparatus); detecting means for detecting the transmission count of a calling signal associated with the selected piece of information (paragraph 49-52, detecting the transmission count of a calling signal associated with user specified number of rings to either reboot or perform some action on the remote pc, e.g.  $n=2$  to remote control and access and  $n<2$  to reboot); control means for controlling transmission of the calling signal only a number of times that is equal to the detected transmission count (paragraph 52, i.e. user determines that the transmission of less than 2 rings will reboot the PC and transmits only one ring to reboot the PC); counting means for counting a number of times the calling signal is received to determine the transmission count of the received calling signals (paragraph 49-52, i.e. counting the number of incoming rings at the access control card); and means for retrieving from said memory a piece of information associated with the transmission count of the received calling signals. (paragraph 49-52, the access control card determines that if  $n=2$ , answers the call and allow remote access and if  $n<2$ , reboot pc)"

However, they do not teach the "transmitter-receiver" being a transceiver and in one physical unit.

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In the same field of endeavor, Joao teaches the "transmitter-receiver" being a transceiver and in one physical unit. (paragraph 161, lines 1-6 and paragraph 167, lines 14-16)

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s transmitter-receiver, Joao's teachings above so that the functionalities can be integrated in a transceiver.

Regarding claim 21, Andersen et al. teach "The transmitter-receiver according to claim 20."

However, they do not teach "further comprising: display means for displaying the retrieved piece of information."

In the same field of endeavor, Joao teaches "further comprising: display means for displaying the retrieved piece of information." (paragraph 161, lines 13-17 and 163, lines 1-4, i.e. the transmitter 2 may be a cellular or telephone which inherently has a display and the display provides video indication of system status as well as providing information indicative of data received by the receiver 2C)

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s transmitter-receiver, Joao's teachings above so that user may be conveniently informed of the different ring settings via a visual display instead of having to memorize them.

Regarding claim 28, Andersen et al. teach "The information reception system according to claim 27."

However, they do not teach "wherein the instructions further comprise: feeding back to a transmission destination either information that the household appliance has operated properly or information that the household appliance has not operated properly."

In the same field of endeavor, Joao teaches "wherein the instructions further comprise: feeding back to a transmission destination either information that the household appliance has operated properly or information that the household appliance has not operated properly." (paragraph 21-23, 234, i.e. CPU reports back the operator (user) the status of the apparatus whether the apparatus running) so that users may be kept apprised of status of remote equipments as stated in paragraph 2 in order to provide security for equipment or premises as stated in paragraph 10.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use, within Andersen et al.'s system, Joao's teachings above so that security may be provided for equipment or premises.

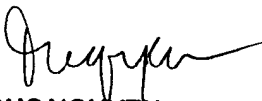
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen C. Chen whose telephone number is 571-272-7649. The examiner can normally be reached on 11 AM-9:30PM Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen C. Chen  
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**DUC NGUYEN**  
**PRIMARY EXAMINER**